

Application No.: 10/823,239

Docket No.: JCLA12729

**REMARKS****Present Status of the Application**

The Office Action rejected claims 1-7 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Office Action rejected claims 1-6, 8, 9, 12-17 under 35 U.S.C. 102(a) as being clearly anticipated by Lygas (U.S. 6532292). In addition, the Office Action rejected claims 7, 10, 11 under 35 U.S.C. 103(a) as being unpatentable over Lygas and further in view of Li (U.S. 2004012739).

Applicant has amended claim 1 and 14. After entry of the foregoing amendments, claims 1-17 remain pending in the present application. Applicant respectfully traverses the rejections addressed to claims 1-17 for at least the reasons set forth below.

**Discussion of the claim rejection under 35 USC 112**

*The Office Action rejected claims 1-7 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.*

In response thereto, Applicant has amended "transmitting an electrical audio signal received from the directional speaker" in claim 1 to "transmitting an electrical remote audio signal received from a communicating network to the directional speaker". Amended independent claim 1 and claims 2-7 dependent thereto are clear and definite.

**Discussion of the claim rejection under 35 USC 102(a)**

*The Office Action rejected claims 1-6, 8, 9, 12-17 under 35 U.S.C. 102(a) as being*

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*clearly anticipated by Lygas (U.S.6532292).*

Amended independent claim 1 recites the features as follows:

1. A communicating apparatus, suitable for a telephone system, comprising:

a directional speaker, for transmitting a directional carrier wave to a user;

a receiver, for receiving at least an audio signal produced by a user such that the directional carrier wave is not received by the receiver; and

**a control unit, coupled to the directional speaker and the receiver, for transmitting an electrical audio signal received from a communicating network to the directional speaker, and for transforming the audio signal received from the receiver into an electrical audio signal and transmitting to the communicating network.**

Independent claim 8 recites a control unit similar to that of independent claim 1.

Lygas discloses that an area 140 of high intensity is generated in an area of overlap between the two fields in the presence of **air or in any other non-linear medium** (see Col.3, Line 36-39), and that because **air contained within the listener's ear canal is a non-linear substance**, the difference frequency of high intensity area 140 produces an audible sound within the listener's ear canal if the frequencies of fields 125, and 135 are properly chosen (see Col.3, Line 43-47). That is, Lygas discloses **an audio signal which performs self-modulation operations in a non-linear substance**.

However, there is not any such limitation in the directional carrier wave recited in claim 1.

Furthermore, Lygas discloses an audio signal generator comprising first and

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second concentric elements 120 and 130 and associated devices, such as an oscillator driver 122, a transducer driver 147 and a lower sideband modulator 145, for driving the first and second concentric elements 120 and 130. But Lygas fails to teach or suggest “a control unit coupled to the directional speaker and the receiver, for transmitting an electrical audio signal received from a communicating network to the directional speaker, and for transforming the audio signal received from the receiver into an electrical audio signal and transmitting to the communicating network.” recited in claim 1.

Moreover, Lygas also fails to teach or suggest the transmission paths and the transmission mechanisms of audio signals recited in claim 1. In particular, Lygas also fails to teach or suggest that an electrical audio signal received from a communicating network is transmitted to a directional speaker and an audio signal received from a receiver is transformed into an electrical audio signal and transmitted to the communicating network.

For at least the foregoing reasons, applicant respectfully submits Lygas does not teach each and every element in amended independent claim 1. Accordingly, amended independent claim 1 patently defines over Lygas, and should be allowed.

Claims 2-6 should also be patentable since they depend on allowable claim 1 directly or indirectly.

As the reasons similar to amended independent claim 1, applicant respectfully submits Lygas also does not teach each and every element in independent claim 8. Accordingly, independent claim 8 patently defines over Lygas, and should be allowed.

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Claims 9, 12-13 should also be patentable since they depend on allowable claim 8 directly or indirectly.

Amended independent claim 14 recites the features as follows:

14. A communicating method for a communicating system generating low echo, comprising: receiving a remote audio signal from a transmitting end through a communicating network; transforming the remote audio signal into a directional audio signal for a receiving end; receiving a local audio signal received by a receiving terminal of the receiving end, wherein the directional audio signal does not propagate through the receiving terminal; and transmitting the local audio signal to the transmitting end.

Lygas discloses that an area 140 of high intensity is generated in an area of overlap between the two fields in the presence of air or in any other non-linear medium (see Col.3, Line 36-39), and that because air contained within the listener's ear canal is a non-linear substance, the difference frequency of high intensity area 140 produces an audible sound within the listener's ear canal if the frequencies of fields 125, and 135 are properly chosen (see Col.3, Line 43-47). That is, Lygas discloses an audio signal which performs self-modulation operations in a non-linear substance. However, there is not any such limitation in the directional audio signal recited in claim14.

Lygas fails to teach or suggest the transmission paths and the transmission mechanisms of signals recited in claim 14. In particular, Lygas fails to teach or suggest

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that a remote audio signal is received from a transmitting end through a communicating network, a local audio signal is received by a receiving terminal of the receiving end and transmitted to the transmitting end, and the directional audio signal does not propagate through the receiving terminal.

For at least the foregoing reasons, applicant respectfully submits Lygas does not teach each and every element in amended independent claim 14. Accordingly, amended independent claim 14 patently defines over Lygas, and should be allowed.

Claims 15-17 should also be patentable since they depend on allowable claim 14 directly or indirectly.

**Discussion of the claim rejection under 35 USC 103(a)**

*The Office Action rejected claims 7, 10, 11 under 35 U.S.C. 103(a) as being unpatentable over Lygas and further in view of Li (U.S. 2004012739). Applicants respectfully traverse the rejections for at least the reasons set forth below.*

Applicant respectfully submits that Li also fails to teach or suggest "a control unit coupled to the directional speaker and the receiver, for transmitting an electrical audio signal received from a communicating network to the directional speaker, and for transforming the audio signal received from the receiver into an electrical audio signal and transmitting to the communicating network" and the transmission paths and the transmission mechanisms of audio signals recited in claim

1.

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Therefore, a person of ordinary skill in the art can not combine Lygas and Li to achieve all of the features as set forth in amended independent claim 1 at the time of the invention. So amended independent claim 1 is patentable over Lygas in view of Li, and thus should be allowed.

Dependent claim 7 should also be patentable since it depends on allowable claim 1 indirectly.

As the reasons similar to amended independent claim 1, a person of ordinary skill in the art also can not combine Lygas and Li to achieve all of the features as set forth in independent claim 8 at the time of the invention. So independent claim 8 is patentable over Lygas in view of Li, and thus should be allowed.

Dependent claims 10, 11 should also be patentable since they depend on allowable claim 8 directly or indirectly.

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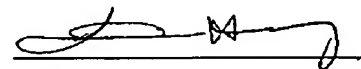
**CONCLUSION**

For at least the foregoing reasons, it is believed that the pending claims 1-17 of the present application patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,



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